APHIS

Animal and Plant Health Inspection Service (APHIS)

Privacy Impact Assessment

Agricultural Quarantine Activity Systems (AQAS)

Version 1.2

APHIS

October 2009

Document Information

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1.1	7 Apr 2009	C. Remalia	Update to new template
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Distribution List			
Name	**Title**	**Agency/Office**	**Contact Information**

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1 System Information

System Information	
Agency:	**Animal Plant Health Inspection Services**
System Name:	Agricultural Quarantine Activity Systems (AQAS)
System Type:	☐ Major Application ☐ General Support System ☒ Non-major Application
System Categorization (per FIPS 199):	☐ High ☒ Moderate ☐ Low
Description of System:	The **Agricultural Quarantine Activity System** (AQAS) records quarantine activities conducted by Department of Homeland Security (DHS), Customs and Border Protection (CBP), and APHIS Plant Protection and Quarantine (PPQ) employees at the ports of entry into the United States. AQAS also records trade-related activities conducted inside the US. AQAS aids the free flow of agricultural goods into the country by collecting agricultural risk data that ultimately help to minimize the impact of quarantine activities on trade. All five of the subsystems of the AQAS system are interrelated, web-based, and share a common platform: 1. **Agricultural Quarantine Inspection Monitoring (AQIM)** The AQIM system provides a systematic approach to determining the risks of cargo approaching the port by collecting specific data about randomly sampled shipments. AQIM then analyzes the data to identify the high-risk criteria and to target inspections accordingly. Ports are selected for random sampling of agricultural shipments using PPQ280 data. 2. **Emergency Action Notification (EAN)** The EAN system tracks the issuance of Emergency Action Notifications (PPQ Form 523). PPQ Form 523 is generated by DHS and PPQ officers throughout the country when an actionable violation is detected related to prohibited pests and agricultural products found in cargo, market places, or domestic sites. 3. **Pest Identification (Pest ID)** The Pest ID system tracks pest interceptions in agricultural commodities at the port and beyond the port, domestically. The Pest ID system records the identification of quarantine pests made by PPQ and cooperating identifiers found during the following events: Agricultural Quarantine Inspections (AQI) Smuggling Interdiction and Trade Compliance (SITC) activities Domestic Surveys Emergency Domestic Program (EDP) events. The Pest ID system also facilitates trade by expediting the reporting of Urgent AQI Interceptions and Domestic Detections. The pest data are used for risk assessments, trade negotiations, port resource allocation, and local program analysis. 4. **PPQ280 System** The PPQ280 system tracks the volume and disposition of commodities (e.g., fruits, vegetables, cut flowers, propagative material, lumber, and

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certain miscellaneous products) imported or transiting through a port. The PPQ280 tracks the final disposition of the commodity; the number of shipments; and the commodity's quantity, type, and country of origin.

The PPQ Plant Inspection Stations use the PPQ264 portion of the PPQ280 system to track quarantined propagative plant material. The PPQ264 data are also used to document inspection results by shipment and to generate notices to state Departments of Agriculture about plant material to be shipped to their states. Both the PPQ280 and the PPQ264 data are used for risk analysis.

5. **Work Accomplishment Data System (WADS)**

The WADS system tracks work activities related to agricultural inspections at US ports. WADS codes are designed to report on activities such as the number of foreign arriving passengers or foreign cargo, number of inspections conducted, or number of clearances conducted. Other WADS codes report on the outcomes of inspection activities, such as number of Quarantine Materials Intercepted (QMIs), reportable pests, violations, or treatments. The purpose of the WADS system is to enable APHIS to set risk-management priorities and to make staffing recommendations. WADS data are analyzed in conjunction with other AQAS data for risk analysis. For example, WADS data are compared with AQIM data to help increase each port's efficiency on agricultural-pest risk targeting.

AQAS Data Warehouse

In addition to the AQAS production system, the AQAS Data Warehouse provides a limited number of power users with the capability to perform ad-hoc queries on large, national datasets for each AQAS subsystem (e.g., AQIM, EAN, Pest ID, PPQ280/264, and WADS).

Currently the AQAS Data Warehouse is implemented at the National Information Technology Center (NITC) in Kansas City, Missouri. The production AQAS system is also hosted at NITC.

To gain access to the AQAS Data Warehouse, the user must get approval from either the Director of PPQ-Quarantine Policy and Analysis Support or the Director of PPQ-Plant Safeguarding and Pest Identification. Users must be approved for national access; that is the data are not restricted by location. Typically AQAS production system users are assigned to a limited number of locations; however, data warehouse users can see data for all locations.

The data warehouse tables are refreshed from the AQAS production data every business day at 2 a.m.

The AQAS Data Warehouse also does the following:

> Reduces the processing load on the AQAS production system.
> Allows users to create reports of their own design without having to write programs.
> Optimizes the AQAS data for information and analysis.
> Provides a quicker response time for reporting than the AQAS production system.

Production Application Server

The Web/Application Server is composed of three software components:

1. **Windows 2003 Enterprise Edition**

The operating system for the web/application server is Windows 2003 Enterprise Edition.

	2. JBOSS Application Server Version 4.0.5
	The software component JBOSS acts as a web-based Java J2EE compliant container in which the custom application code is deployed. The client workstation accesses the AQAS application by connecting through JBOSS using the Internet Explorer web browser. Special functionality provided by JBOSS includes JDBC-based database connection pooling.
	3. Crystal Report Application Server (RAS) Version 10.0.0.533
	Crystal Reports Application Server Software (RAS) acts as a web-based container for deploying Crystal Reports. Any request for a report made to the JBOSS module is forwarded to the Crystal RAS module for processing and creating the report. The report formats are created in advance and are stored.
	When a report is requested by the user through JBOSS, Crystal RAS finds the report file, executes the request and passes the report back to JBOSS. Crystal RAS gets the data for the report from the Oracle database using standard Oracle-supplied database drivers.
	Production Database Server
	The Database Server is composed of two software components:
	1. AIX version 5.3
	The operating system for the database server is IBM AIX v.5.3.
	2. Oracle 10g Enterprise Edition Release 10.2.0.3
	All AQAS data are stored in the Oracle 10g database.
	Production Reporting Server
	The Reporting Server is composed of two software components:
	1. AIX version 5.2: The operating system for the reporting server is IBM's AIX version 5.2.
	2. Oracle 10g Enterprise Edition Release 10.2.0.3
	All AQAS data are stored in the Oracle 10g database.
Who owns this system? (Name, agency, contact information)	Alison Young, Branch Chief, Project Management, PPQ-InformationTechnology Development & Coordination (ITDC) 4700 River Road Riverdale, Maryland 20737 (301) 734-3821 Alison.I.Young@aphis.usda.gov
Who is the security contact for this system? (Name, agency, contact information)	John Dirocco, Acting Project Manager, PPQ-ITDC Information Systems Security Officer 4700 River Road Riverdale, Maryland 20737 (301) 734-7342 John.A.Dirocco@aphis.usda.gov
Who completed this document? (Name, agency, contact information)	Carl Remalia PPQ-ISSM 301-734-0928 Carl.remalia@aphis.usda.gov

2 Data Information

2.1 Data Collection

No.	Question	Response
1	Generally describe the data to be used in the system.	The **Agricultural Quarantine Activity System** (AQAS) tracks data about quarantine activities conducted by Department of Homeland Security (DHS) Customs and Border Protection (CBP) and APHIS Plant Protection and Quarantine (PPQ) employees at the ports of entry into the United States. The data collected in the AQAS system contain a wide range of trade events including ship arrivals, quarantine activities, invasive pest interceptions, and other commodity exclusion actions. Additionally, it contains sampling results to statistically validate the quality of the import inspection pathways. AQAS also records trade-related activities conducted inside the US. Both the EAN and Pest ID subsystems track domestic activities, including actionable violations related to agricultural products and pest interceptions found in domestic sites. The AQAS system collects the following data: • **Customer Data:** PPQ280 and EAN collect the owner/consignee and shipper information. PPQ264 collects the name, business address, email address and business phone number of state contacts who are state and university employees. • **Employee Data:** The AQAS system collects the user name (first initial, middle initial, and last name), email address, and assigned location name for DHS and APHIS employees. • **Other Data:** Commodity import, agricultural inspection data, pest data.
2	Does the system collect Social Security Numbers (SSNs) or Taxpayer Identification Numbers (TINs)?	☐ Yes ☒ No – If NO, go to question 3.
2.1	State the law or regulation that requires the collection of this information.	

No.	Question	Response
3	Is the use of the data both relevant and necessary to the purpose for which the system is being designed? In other words, the data is absolutely needed and has significant and demonstrable bearing on the system's purpose as required by statute or by Executive order of the President.	☒ Yes ☐ No
4	Sources of the data in the system.	Sources of data come from both USDA agencies and third party sources.
4.1	What data is being collected from the customer?	First Name Middle Initial (optional) Last Name Email Address Role Location Name Street Address City State Zip Code/Postal Code Country Phone Number Fax Number Badge Number
4.2	What USDA agencies are providing data for use in the system?	APHIS
4.3	What state and local agencies are providing data for use in the system?	None
4.4	From what other third party sources is data being collected?	Department of Homeland Security, Customs and Border Protection
5	Will data be collected from sources outside your agency? For example, customers, USDA sources (i.e., NFC, RD, etc.) or Non-USDA sources.	☒ Yes ☐ No – If NO, go to question 6.
5.1	How will the data collected from customers be verified for accuracy, relevance, timeliness, and completeness?	Data is recorded as a result of a finding from inspection of goods and cargo entering the United States. Collected data are primary source data and are used to initiate quarantine action as well as for federal reporting of quarantine activities.

No.	Question	Response
5.2	How will the data collected from USDA sources be verified for accuracy, relevance, timeliness, and completeness?	There is a quarterly meeting with joint representation of DHS-CBP and USDA-APHIS-PPQ personnel to review the AQIM, WADS, PPQ280, and EAN data of each period for accuracy, relevance, timeliness, and completeness. For PPQ264, data are collected in a timely manner: as shipments are cleared or shortly thereafter. National, regional, and local PPQ staff periodically review the data for accuracy and completeness. The staff also reviews the data to ensure its relevance for the purposes of risk assessment and reporting to the states. For Pest ID, PPQ identifiers review records for accuracy, relevance, timeliness, and completeness, and they correct the data as needed. The PPQ National Identification Staff (NIS) in Riverdale also regularly review Pest ID records (either identified by business system rules or per identifier requests) for accuracy relevance, timeliness, and completeness. The PPQ NIS staff evaluates and updates the data as needed.
5.3	How will the data collected from non-USDA sources be verified for accuracy, relevance, timeliness, and completeness?	There is a quarterly meeting with joint representation of DHS-CBP and USDA-APHIS-PPQ personnel to review the AQIM, WADS, PPQ280, and EAN data of each period for accuracy, relevance, timeliness, and completeness. The DHS-CBP Port Directors has a QA process called *Closing the Month*, which signifies whether the port has completed the data entry for the month and the data are complete and accurate.

2.2 Data Use

No.	Question	Response
6	Individuals must be informed in writing of the principal purpose of the information being collected from them. What is the principal purpose of the data being collected?	The principal purpose of AQAS is to collect and store data on agricultural goods. These data are used to make risk-based decisions about the admissibility of certain commodities from other countries.
7	Will the data be used for any other purpose?	☒ Yes ☐ No – If NO, go to question 8.

No.	Question	Response
7.1	What are the other purposes?	AQAS data will also be used for risk assessment and trend analysis. Additionally, DHS and PPQ management use the data to staff the ports and PPQ offices.
8	Is the use of the data both relevant and necessary to the purpose for which the system is being designed? In other words, the data is absolutely needed and has significant and demonstrable bearing on the system's purpose as required by statute or by Executive order of the President	☒ Yes ☐ No
9	Will the system derive new data or create previously unavailable data about an individual through aggregation from the information collected (i.e., aggregating farm loans by zip codes in which only one farm exists.)?	☒ Yes ☐ No – If NO, go to question 10.
9.1	Will the new data be placed in the individual's record (customer or employee)?	☐ Yes ☒ No
9.2	Can the system make determinations about customers or employees that would not be possible without the new data?	☒ Yes ☐ No
9.3	How will the new data be verified for relevance and accuracy?	There is a quarterly meeting with joint representation of DHS-CBP and USDA-APHIS-PPQ personnel to review the AQIM, WADS, PPQ280, and EAN data of each three-month period for accuracy, relevance, timeliness, and completeness. For Pest ID, PPQ identifiers review records for accuracy, relevance, timeliness, and completeness, and they correct the data as needed. The PPQ National Identification Staff (NIS) in Riverdale regularly reviews Pest ID records for accuracy relevance, timeliness, and completeness. These records are identified by business system rules or per identifier requests. The PPQ NIS staff evaluates and updates the data as needed.
10	Individuals must be informed in writing of the routine uses of the information being collected from them. What are the intended routine uses of the data being collected?	Routine uses of AQAS data include risk assessment and trend analysis. The data are also used to plan staffing for the ports and PPQ offices.
11	Will the data be used for any other uses (routine or otherwise)?	☐ Yes ☒ No – If NO, go to question 12.
11.1	What are the other uses?	

No.	Question	Response
12	Automation of systems can lead to the consolidation of data – bringing data from multiple sources into one central location/system – and consolidation of administrative controls. When administrative controls are consolidated, they should be evaluated so that all necessary privacy controls remain in place to the degree necessary to continue to control access to and use of the data. Is data being consolidated?	☒ Yes ☐ No – If NO, go to question 13.
12.1	What controls are in place to protect the data and prevent unauthorized access?	For the AQAS production system, each user must be authorized by a PPQ regional or national program coordinator. Users are granted access based on their work assignment and work location. For the AQAS Data Warehouse, either the PPQ Director of Quarantine Policy Analysis and Support or the PPQ Director of Plant Safeguarding and Pest Identification must authorize each user to use the system. There are only a limited number of AQAS Data Warehouse users (currently about 50). The Data Warehouse users can only read the data; they cannot add, modify, or delete it.
13	Are processes being consolidated?	☒ Yes ☐ No – If NO, go to question 14.
13.1	What controls are in place to protect the data and prevent unauthorized access?	Both the AQAS production system and AQAS Data Warehouse are protected by firewalls and are only accessible to users on the DHS or USDA computer networks. Most users are assigned to a specific port or domestic location(s) for which they can enter and update data. Users assigned to a specific location(s) cannot add, change, or delete data for other locations.

2.3 Data Retention

No.	Question	Response
14	Is the data periodically purged from the system?	☒ Yes ☐ No – If NO, go to question 15.
14.1	How long is the data retained whether it is on paper, electronic, in the system or in a backup?	5yrs
14.2	What are the procedures for purging the data at the end of the retention period?	Currently all data entered in AQAS will be retained. Working on establishing procedures for purging the data. POA&M 11101 has been established.

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No.	Question	Response
14.3	Where are these procedures documented?	POA&M 11101 has been established to address this question.
15	While the data is retained in the system, what are the requirements for determining if the data is still sufficiently accurate, relevant, timely, and complete to ensure fairness in making determinations?	Once entered and completed/approved, the data is static. Only a very limited number of users (Regional Coordinators and System Administrators) can update records that have been closed.
16	Is the data retained in the system the minimum necessary for the proper performance of a documented agency function?	☒ Yes ☐ No

2.4 Data Sharing

No.	Question	Response
17	Will other agencies share data or have access to data in this system (i.e., international, federal, state, local, other, etc.)?	☒ Yes ☐ No – If NO, go to question 18.
17.1	How will the data be used by the other agency?	AQAS data will be used by DHS for making staffing recommendations.
17.2	Who is responsible for assuring the other agency properly uses the data?	The system's security organization consisting of the Agency Privacy Officer, Designated Approving Authority, Certifying Authority, Information System Security Program Manager and System Owner.
18	Is the data transmitted to another agency or an independent site?	☐ Yes ☒ No – If NO, go to question 19.
18.1	Is there appropriate agreement in place to document the interconnection and ensure the PII and/or Privacy Act data is appropriately protected?	
19	Is the system operated in more than one site?	☐ Yes ☒ No – If NO, go to question 20.
19.1	How will consistent use of the system and data be maintained in all sites?	

2.5 Data Access

No.	Question	Response
20	Who will have access to the data in the system (i.e., users, managers, system administrators, developers, etc.)?	• Users DHS/Customs and Border Protection USDA Plant Protection and Quarantine (PPQ) USDA Agriculture Marketing Service (AMS) • Managers USDA Plant Protection and Quarantine (PPQ) • System Administrators USDA National Information Technology Center (NITC) USDA Plant Protection and Quarantine (PPQ) Contractors: Communications Resource, Inc. (CRI) • Developers Contractors: Communications Resource, Inc. (CRI)
21	How will user access to the data be determined?	All users are first approved by PPQ national or regional program coordinators. Users must complete access request forms that must be approved prior to issuance and activation of an account.
21.1	Are criteria, procedures, controls, and responsibilities regarding user access documented?	☒ Yes ☐ No
22	How will user access to the data be restricted?	AQAS uses role-based access controls to restrict user access. Users are granted access to the system based on their work assignments and work locations.
22.1	Are procedures in place to detect or deter browsing or unauthorized user access?	☒ Yes ☐ No
23	Does the system employ security controls to make information unusable to unauthorized individuals (i.e., encryption, strong authentication procedures, etc.)?	☒ Yes ☐ No

2.6 Customer Protection

No.	Question	Response
24	Who will be responsible for protecting the privacy rights of the customers and employees affected by the interface (i.e., office, person, departmental position, etc.)?	AQAS Information System Security Officer (ISSO)
25	How can customers and employees contact the office or person responsible for protecting their privacy rights?	Customers and employees can access appropriate contact information via the AQAS help site.
26	A "breach" refers to a situation where data and/or information assets are unduly exposed. Is a breach notification policy in place for this system?	☒ Yes – If YES, go to question 27. ☐ No
26.1	If NO, please enter the Plan of Action and Milestones (POA&M) number with the estimated completion date.	
27	Consider the following: • Consolidation and linkage of files and systems • Derivation of data • Accelerated information processing and decision making • Use of new technologies Is there a potential to deprive a customer of due process rights (fundamental rules of fairness)?	☐ Yes ☒ No – If NO, go to question 28.
27.1	Explain how this will be mitigated?	
28	How will the system and its use ensure equitable treatment of customers?	All users are assigned established roles within the AQAS application. The AQAS System Owners and Regional Coordinators assign roles to users and set policies for operational use of AQAS.
29	Is there any possibility of treating customers or employees differently based upon their individual or group characteristics?	☐ Yes ☒ No – If NO, go to question 30
29.1	Explain	

3 System of Record

No.	Question	Response
30	Can the data be retrieved by a personal identifier? In other words, does the system actually retrieve data by the name of an individual or by some other unique number, symbol, or identifying attribute of the individual?	☒ Yes ☐ No – If NO, go to question 31

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No.	Question	Response
30.1	How will the data be retrieved? In other words, what is the identifying attribute (i.e., employee number, social security number, etc.)?	The AQAS production system only allows users to retrieve records by a personal identifier in one subsystem, Pest ID. In AQAS-Pest ID, users can retrieve pest records via the Pest ID ad-hoc query by the name of the cargo inspector and the name of the identifier. The AQAS Data Warehouse permits users to retrieve records by personal identifier: The user name of the employee who created or last updated a record for all AQAS subsystems. The name of the shipper/distributor and consignee for EAN records. The name of the PPQ officer who issued the EAN record. The name of the state contact for PPQ264 records. The name of the cargo inspector and identifier for Pest ID records. The badge number of the employee who performed the inspection for PPQ280 records.
30.2	Under which Systems of Record (SOR) notice does the system operate? Provide number, name and publication date. (SORs can be viewed at www.access.GPO.gov.)	Awaiting signature of this PIA to continue SORN process. POA&M 11100 has been established.
30.3	If the system is being modified, will the SOR require amendment or revision?	☐ Yes ☒ No

4 Technology

No.	Question	Response
31	Is the system using technologies in ways not previously employed by the agency (e.g., Caller-ID)?	☐ Yes ☒ No – If NO, the questionnaire is complete.

No.	Question	Response
31.1	How does the use of this technology affect customer privacy?	

5 Completion Instructions

Upon completion of this Privacy Impact Assessment for this system, the answer to OMB A-11, Planning, Budgeting, Acquisition and Management of Capital Assets, Part 7, Section E, Question 8c is:

    1. Yes.

PLEASE SUBMIT A COPY TO THE OFFICE OF THE ASSOCIATE CHIEF INFORMATION OFFICE FOR CYBER SECURITY.

Privacy Impact Assessment Authorization

Memorandum

I have carefully assessed the Privacy Impact Assessment for the

___ Agricultural Quarantine Activity Systems (AQAS)__

This document has been completed in accordance with the requirements of the E-Government Act of 2002.

We fully accept the changes as needed improvements and authorize initiation of work to proceed. Based on our authority and judgment, the continued operation of this system is authorized.

_____   12/9/08
System Manager/Owner   Date
OR Project Representative
OR Program/Office Head.

_____   12/22/09
Agency's Chief FOIA officer   Date
OR Senior Official for Privacy
OR Designated privacy person

_____   12/17/09
APHIS ISSPM   Date

_____   12/ / 2009
Agency OCIO   Date

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